

Work Order ID 57156

March 24, 2010 8:43:12 AM



Page 1

Item ID: D206-642-341

Revision ID:

Item Name: Replacement Skidtube

Start Date: 24/03/2010 Start Qty: 1.00

Required Date: 07/04/2010 Req'd Qty: 1.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date: 20-3-2011 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
D2650	F	0.00							



DOCUMENT CONTROL

DC
Document Control

Memo

0.00

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item Name: Replacement Skidtube

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Start Date: 24/03/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 07/04/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

110



Skidtubes

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInspec.
Stamp

0.00

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

→ DP 10-3-30

2-Remove ridge on inside of Fwd edge of tubeas per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod m112507/m113207 BG 10-3-30

4-Grind weld flush to cap on top surface only. BG 10-3-30

5-Cut aft end to lenght as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A,& B) and DT8025. Open to 00.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtubeas per Dwg D2650

11-Deburr and Blow out all chips form inside the tube

→ DP 10-3-31

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120



Chemical Conversion Coat per QSI005 4.1

0.00

J - - AWM10-3-31

HandFinish

Memo

0.00

Hand Finishing

130



Skidtubes

0.00

Skidtubes

Memo

0.00

Skidtubes

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail
(without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650 (without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs.
cure time before cutting Start Date: 03/31 Time: 10:15 Finish Date: 04/15 Time: 7:30AM A/R Sikaflex-291 4/2/29 - 11/24/29Sikaflex expiry date:

10-7-20

JWM -10-3-31

JWM

-10-3-31

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

140



QC

Quality Control

Operation
Description

QC5- Inspect part completeness to step on W/O

Set Up/
Run Hours

0.00

Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

S 10/04/05

150



Skidtubes

Skidtubes

0.00

Memo

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod M112507

BE 10/04/05

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

4- Install nut plate as per dwg

10-04-6

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____

Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

HandFinishing

0.00

HandFinish

Memo

0.00

Hand Finishing

Install D2680-041 Nut Plate as per Dwg D2650

N/A done on day #150
DP 10-4-10

170

QC10- Inspect visual per QSI004- ground welds

0.00

QC

Memo

0.00

Quality Control

5/10/10

180

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

5/10/10
70

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

190

Operation
Description

Pressure Wash per QSI005 4.3

Set Up/
Run Hours

0.00

Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

HandFinish

Hand Finishing

Memo

0.00

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

BR 10-4-7 *0*

200



White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M113170

0.00

7/11/10/04/09

Powdercoat

Powder Coating

Memo

0.00

START TIME: 10:45AM
 OVEN TEMPERATURE: 320°
 FINISH TIME: 11:15AM

XL 8

210



QC3- Inspect Part Finish

0.00

QC

Quality Control

Memo

0.00

BR 10-4-7 *0 9*

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 07/04/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

220

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

HandFinish

Hand Finishing

0.00

HandFinishing

Memo

0.00

1-Install inserts & wearpads as per Dwg D2622. Use a drop of Sikaflex inside
insert holes before installing wearpad/wearplate.A/R Sikaflex-291 MT13108Sikaflex expiry date: 10/082-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install
plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291 MT13108Sikaflex expiry date: 10/086-Wing Walk as per Dwg D2650-5 and QSI 005 4.4 Batch: MT13108

BL 10-4-8 ①

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230



QC3- Inspect Part Finish

0.00

S 04/08

QC

Quality Control

240



QC5- Inspect part completeness to step on W/O

0.00

S 04/08

QC

Quality Control

250



Packaging

0.00

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D206-642-341

Location: _____

PPP Rev: _____

PPN 57158

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

Memo

10/04/27 JJ
MF
10-4-27

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 1

Work Order ID: 57156



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 24/03/2010

Required Date: 07/04/2010

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

Required Qty: 1.00

IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/ AN960JD416	Replacement	Mfg/ Purchased	Bin	Primary	Last	Route	Unit of Each	Qty on 8.0000	Remaining 1.0000	Qty	Date	Status
				No								

Washer

Component Item ID/ CCR264SS3-3	Replacement	Mfg/ Purchased	Bin	Primary	Last	Route	<u>Warehouse</u>		Loc Qty	<u>Loc Code</u>	<u>Location</u>	<i>1 BLP-4-8.</i>
							Main Warehouse	ST357				
				No			111279	113706	8			
									8			
									Each	513.0000	2.0000	

Cherry Rivet

Component Item ID/ CR3212-4-03	Replacement	Mfg/ Purchased	Bin	Primary	Last	Route	<u>Warehouse</u>		Loc Qty	<u>Loc Code</u>	<u>Location</u>	<i>10-4-6</i>
							Main Warehouse	ST311				
				No			111548		513			
							111827		16			
							112314		1			
							113539		2			
							113973		6			
									488			
									Each	236.0000	2.0000	

Cherry Rivet

Component Item ID/ CR3212-4-03	Replacement	Mfg/ Purchased	Bin	Primary	Last	Route	<u>Warehouse</u>		Loc Qty	<u>Loc Code</u>	<u>Location</u>	<i>10-4-6</i>
							Main Warehouse	ST311				
				No			111359		236			
							112314		84			
									152			

W/O:		WORK ORDER CHANGES					
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Required Date: 07/04/2010

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

Required Qty: 1.00

IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/ D2620	Replacement	Mfg/ Manufactured	Bin	Primary No	Last	Route	Unit of Each	Qty on 8.0000	Remaining 1.0000	Qty	Date	Status

Skidtube, 206 Skidtube

Warehouse

Location

Main Warehouse

LG

55559

Loc Qty

8

8

Each

87.0000

1.0000

Loc Code

1



10-3-30

D2647



Cap

Manufactured No

Warehouse

Location

Main Warehouse

FP

55352

Loc Qty

87

87

Each

207.0000

19.0000

Loc Code

1

AE 10-3-30

D2649



Cross Bolt Spacer

Manufactured No

Warehouse

Location

Main Warehouse

LG

36013

47112

48271

51529

55000

Loc Qty

207

5

18

4

3

177

Loc Code

19 BG 10/04/06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

Required Qty: 1.00

IPP Rev: I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D2654-5		Manufactured	No				Each	2.0000	1.0000			



Web

D2680-041



Nut Plate

Manufactured

No

Warehouse

Location

Main Warehouse

LG

46638

Loc Qty

Loc Code

2

2

Each

51.0000

1.0000

B-S70241-AWM
10-3-31(1)

ALS4-1032-130



Insert

Purchased

No

Warehouse

Location

Main Warehouse

ST021

33061

55366

Loc Qty

Loc Code

51

1

50

Each

438.0000

54.0000



10-4-6

ALS7-1032-130

Warehouse

Location

Main Warehouse

ST282

110511

Loc Qty

Loc Code

438

438

54. BL 10-4-8.

W/O:		WORK ORDER CHANGES					
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Start Qty: 1.00

IPP Rev: I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Required Qty: 1.00

Component Item ID/	Replacement	Mfg/ Purchased	Bin No	Primary No	Last	Route 220	Unit of Each	Qty on 0.0000	Remaining 54.0000	Qty	Date	Status
AN960C10L		Purchased		NAS1149C0332R		113524				34	BL 10-4-8	
washer												
AN960JD10L		Purchased		No		220	Each	3,003.000	2.0000			
Washer												

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

ST348	3003	
101291	16	
105793	49	
110985	2938	

D2646	Manufactured	No	220	Each	41.0000	1.0000
Aft Cap						

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

FP6	36	
46327	4	
48109	4	
52663	28	

Main Warehouse

fp7	5	
52663	5	

W/O:		WORK ORDER CHANGES					
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Start Date: 24/03/2010

Required Date: 07/04/2010

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

Required Qty: 1.00

IPP Rev: I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D2651-1		Manufactured	No			220	Each	348.0000	14.0000			



Plug

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

141

51530 ✓

141

PL BL 10-4-8.

Main Warehouse

fpa

207

53349

207

D2651-3



Manufactured

No

220

Each

537.0000 14.0000



O-Ring

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

537

43849 ✓

3

46114 ✓

534

PL BL 10-4-8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 6

Work Order ID: 57156



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 24/03/2010

Required Date: 07/04/2010

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

IPP Rev: I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Required Qty: 1.00

Component Item ID/	Replacement	Mfg/ Manufactured	Bin No	Primary	Last	Route 220	Unit of Each	Qty on 6.0000	Remaining 1.0000	Qty	Date	Status
D3535-11												



Wearshoe

Warehouse

Location

Main Warehouse

FP

46647 ✓

Loc Qty

6

6

Loc Code

1 Blk 10-4-8

D3535-23



Wearshoe

Manufactured No

Warehouse

Location

Main Warehouse

FP

53467 ✓

56054

Loc Qty

14

2

12

Loc Code

1 Blk 10-4-8

D3535-35



Wearshoe

Manufactured No

Warehouse

Location

Main Warehouse

FP

51608 ✓

Loc Qty

9

9

Loc Code

1 Blk 10-4-8.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 7

Work Order ID: 57156



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 24/03/2010

Required Date: 07/04/2010

Comments: IPP Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM

Start Qty: 1.00

Required Qty: 1.00

IPP Rev: I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Component Item ID/	Replacement	Mfg/ Manufactured	Bin	Primary	Last	Route	Unit of Each	Qty on 14.0000	Remaining 1.0000	Qty	Date	Status
D3536-11				No		220						



Gasket

Warehouse

Location

Main Warehouse

ST497A
46649
46715

14

10

4

Loc Qty

Loc Code

1 Blk 10-4-8

D3536-23

Manufactured

No

220 Each 8.0000 1.0000



Gasket

Warehouse

Location

Main Warehouse

FP
30754
53468

8

1

7

Loc Qty

Loc Code

1 Blk 10-4-8

D3536-35

Manufactured

No

220 Each 11.0000 1.0000



Gasket

Warehouse

Location

Main Warehouse

FP
51628

11

11

Loc Qty

Loc Code

1 Blk 10-4-8

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID:	57156		Start Date:	24/03/2010	Required Date:	07/04/2010					
Parent Item:	D206-642-341		Start Qty:	1.00	Required Qty:	1.00					
Parent Item Name:	Replacement Skidtube										
Comments:	IPP Rev: H 05.10.11 □ Added D3429-1 per CHG004 □ KJ/CP/JLM IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC										
Component Item ID/	Replacement	Mfg/ Manufactured	Bin No	Primary Last	Route 220	Unit of Each	Qty on 53.0000	Remaining 6.0000	Qty	Date	Status
D3537-1											
											
Wearpad											

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

FP	52	
48288	2	
55465 ✓	50	

6 BK 10-4-8.

Main Warehouse

FP17	1	
51678	1	

1 BK 10-4-8

D3537-3



Wearpad

Manufactured	No	Route	Unit of Each	Qty on 24.0000	Remaining 1.0000
--------------	----	-------	-----------------	-------------------	---------------------

220	Each	24.0000	1.0000	
-----	------	---------	--------	---

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

FP	24	
33881	4	
35697 ✓	20	

1 BK 10-4-8

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 9

Work Order ID: 57156



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 24/03/2010

Required Date: 07/04/2010

Comments:

IPP Rev: H 05.10.11 □ Added D3429-1 per CHG004 □ KJ/CP/JLM
IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-03-02 as per DSI9440 rev.a DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/	Replacement	Mfg/ Purchased	Bin	Primary	Last	Route	Unit of Each	Qty on 2,105.000	Remaining 56.0000	Qty	Date	Status
MS27039-1-08			No			220						



Screw

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST291	2105	
110467	3	
110552	102	
110835 ✓	2000	

56 .BR 10-4-8

MS27039-4-06	Purchased	No	220	Each	38.0000	1.0000	



Screw

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST292	38	
109061 ✓	38	

1 BR 10-4-8.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 1 7 6 5 4 3 2 1

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 57154

BB10-3-24RELEASED
08.08.08

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	RMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW: INCCR. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS	DRAWING NO. <u>D2650</u> REV. F SHEET 1 OF 6	
CHECKED	A	MFG. APPR. <u>BB</u>	
APPROVED	BB	TITLE <u>206/407 SKIDTUBE ASSEMBLIES</u> SCALE <u>NTS</u>	
DATE	08.08.08	COPRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 1 7 6 5 4 3 2 1

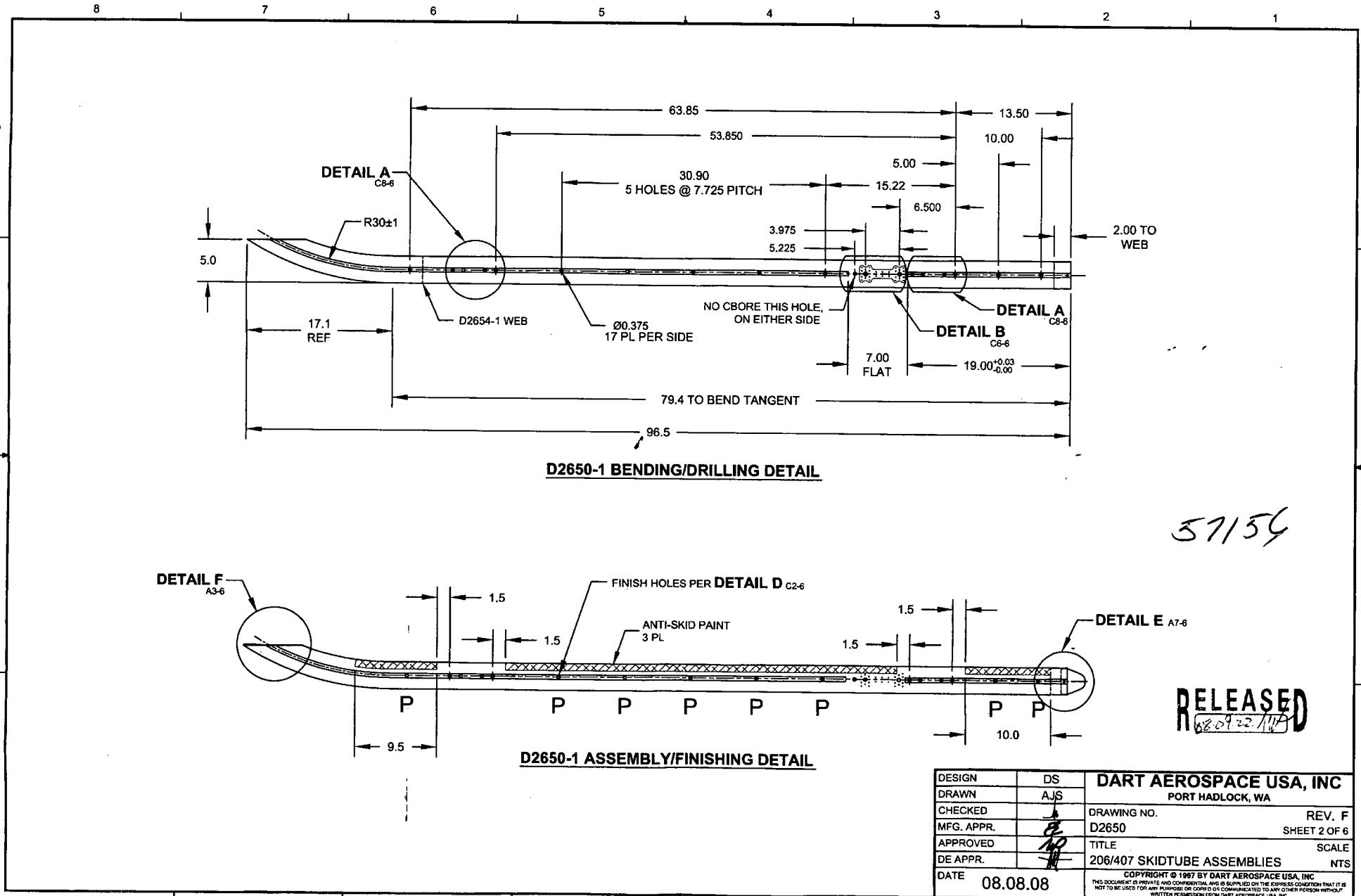
1

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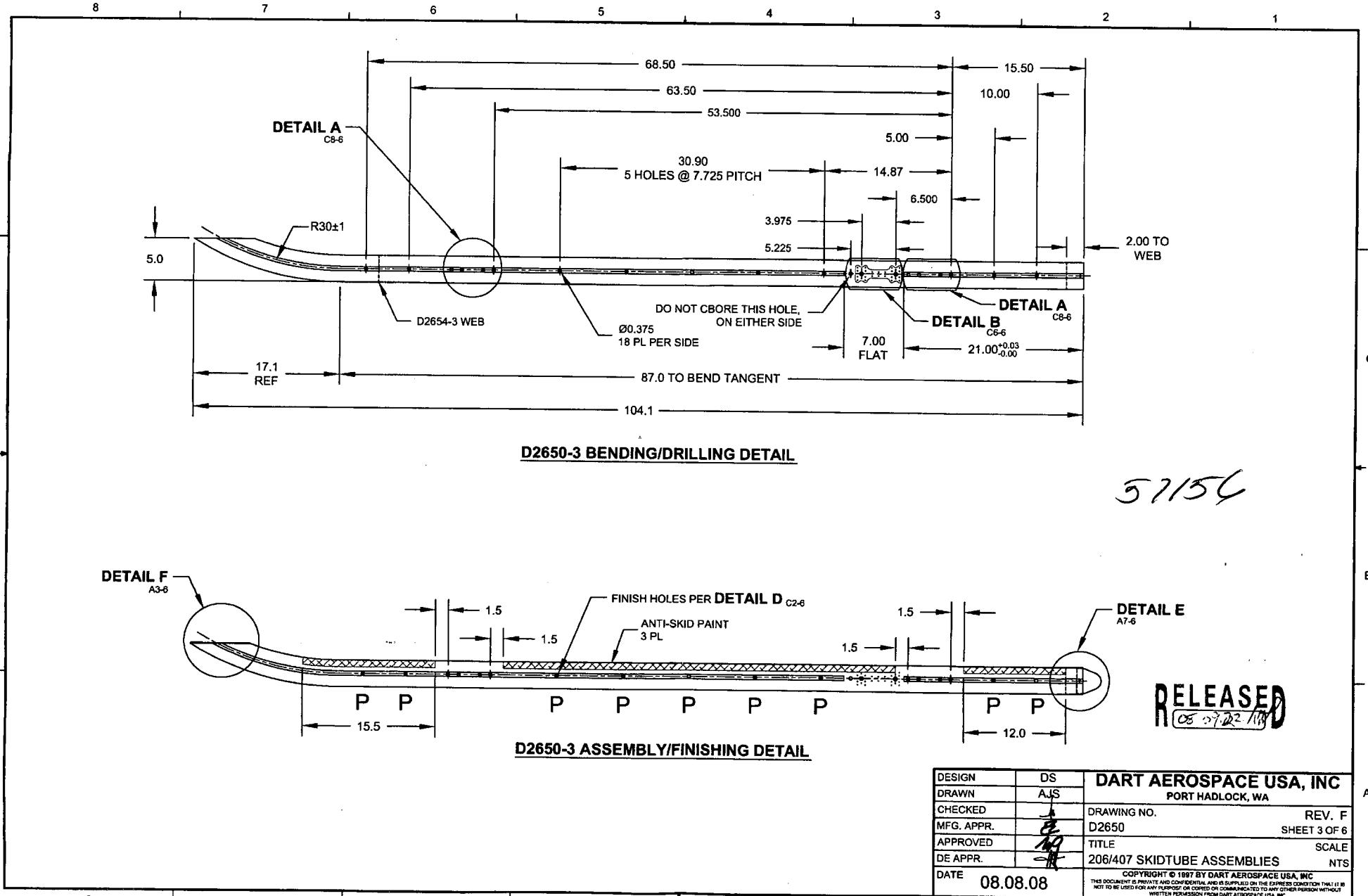


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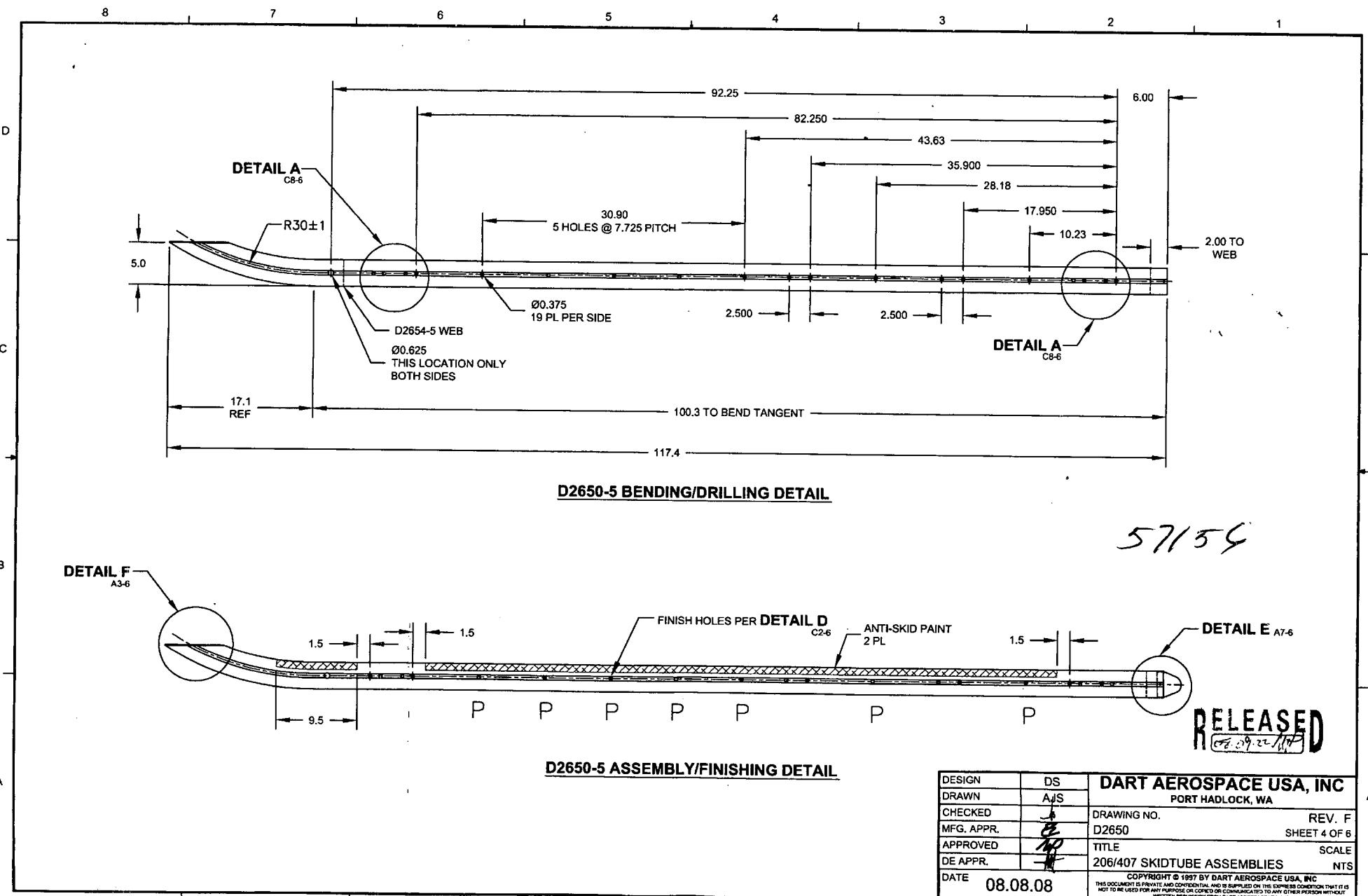


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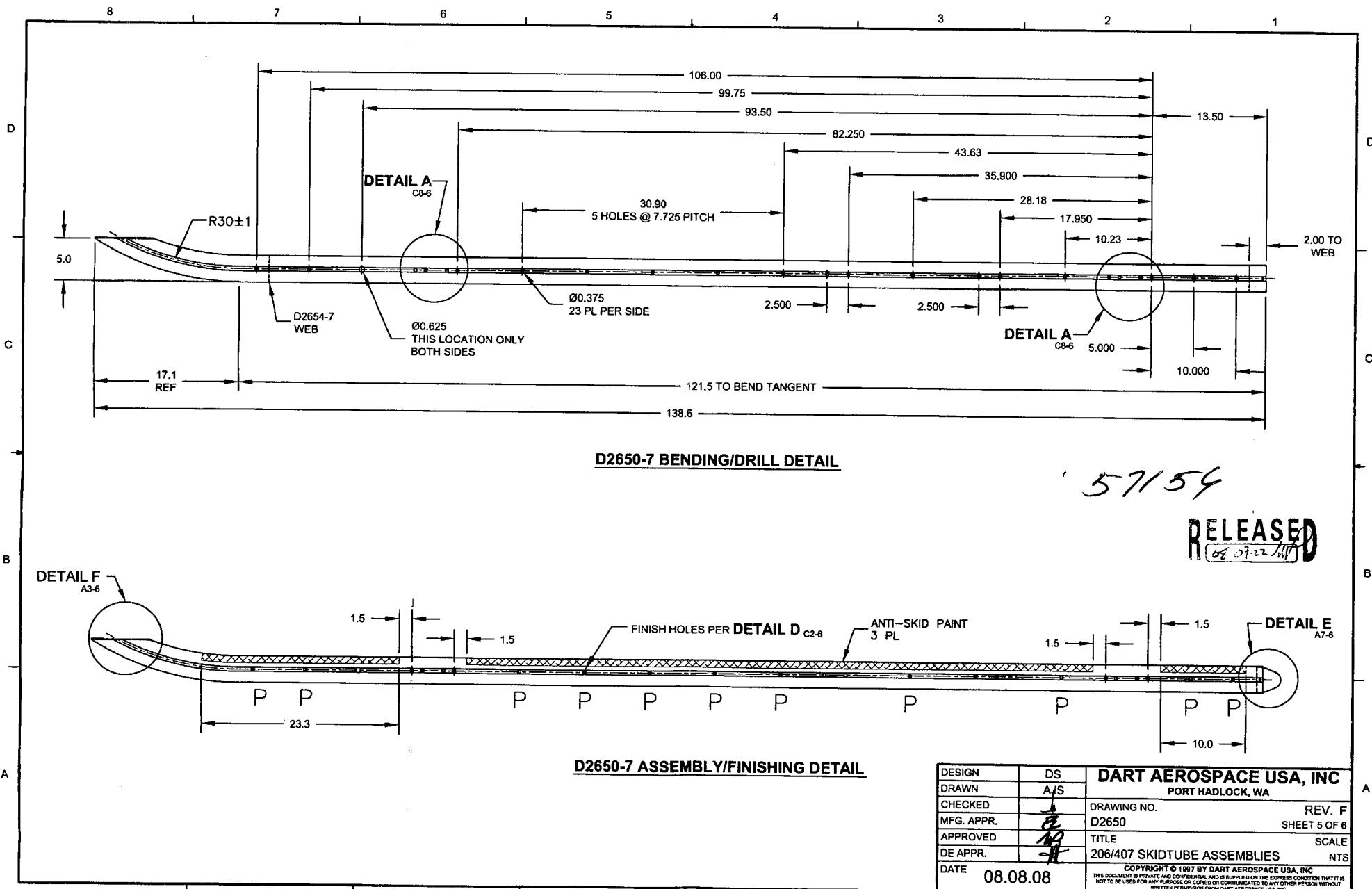


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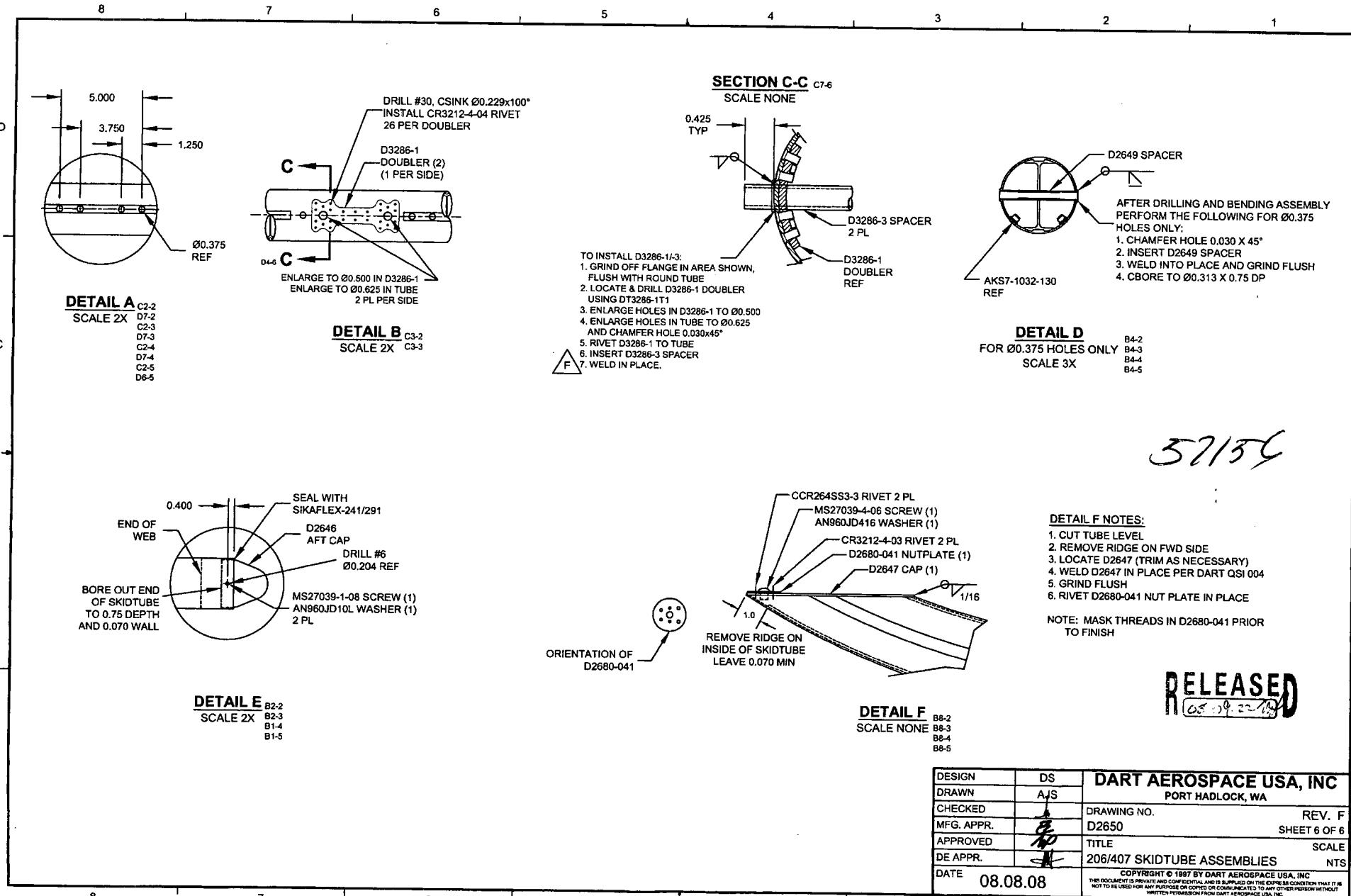


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NO. 223

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: J 55777
Part number: 0206-642-441
Description: 206 skid tube
Welding Process: Tig Mig
Base material: Aluminum
Current: AC DCL

TEST REQUIREMENTS AND RESULTS

Visual: pass fail
Penetration: pass fail

UNACCEPTABLE

Cracks: pass fail
Undercut: pass fail
Pin holes: pass fail
Overlap (cold lap): pass fail
Porosity (surface): pass fail
Coloration: pass fail

Qualifier Barclay Elliott Date of Test Coupon 10-02-16
Welder Barclay Elliott Date of Test Coupon 10-02-16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld